

H1763

0057853

Lionville Laboratory, Inc.
VOA ANALYTICAL DATA PACKAGE FOR
TNU-HANFORD B02-054, H1763

RFW LOT # :0205L562

CLIENT ID	RFW #	MTX	PREP #	COLLECTN DATE	REC	EXT/PREP	ANALYSIS
B14DN9	001	W	02LVG108	04/25/02	05/03/02	N/A	05/07/02
B14DN9	001 MS	W	02LVG108	04/25/02	05/03/02	N/A	05/07/02
B14DN9	001 MSD	W	02LVG108	04/25/02	05/03/02	N/A	05/07/02

LAB QC:

VBLKVH	MB1	W	02LVG108	N/A	N/A	N/A	05/07/02
VBLKVH	MB1 BS	W	02LVG108	N/A	N/A	N/A	05/07/02

RECEIVED
AUG 12 2002
EDMC



Client: TNU-HANFORD B02-054
LVL #: 0205L562
SDG/SAF #: H1763/B02-054

W.O. #: 11343-606-001-9999-00
Date Received: 05-03-2002


GC/MS VOLATILE

One (1) water sample was collected on 04-25-2002.

The sample and its associated QC samples were analyzed according to criteria set forth in Lionville Laboratory OPs based on SW 846 Method 8260B for client specified volatile target compounds on 05-07-2002.

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analyses:

1. All results presented in this report are derived from samples that met LvLI's sample acceptance policy.
2. The required analysis holding time was met.
3. A non-target compound was detected in B14DN9.
4. All surrogate recoveries were within EPA QC limits.
5. All matrix spike recoveries were within EPA QC limits.
6. All blank spike recoveries were within EPA QC limits.
7. The method blank contained the common laboratory contaminants Methylene Chloride and Acetone at levels less than 3x the CRQL.
8. Internal standard area and retention time criteria were met.
9. A spectral search was performed for the compounds Tetrahydrofuran; however, this compound was not detected in the sample.
10. "I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard-copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature."


J. Michael Taylor
President
Lionville Laboratory Incorporated

05-23-02
Date

som\group\data\voa\tnu-hanford\0205-562.doc

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 1 2 pages.

GLOSSARY OF VOA DATA

DATA QUALIFIERS

- U** = Compound was analyzed for but not detected. The associated numerical value is the estimated sample quantitation limit which is included and corrected for dilution and percent moisture.
- J** = Indicates an estimated value. This flag is used under the following circumstances: 1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; or 2) when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. For example, if the limit of detection is 10 ug/L and a concentration of 3 ug/L is calculated, it is reported as 3J.
- B** = This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination. This flag is also used for a TIC as well as for a positively identified TCL compound.
- E** = Indicates that the compound was detected beyond the calibration range and was subsequently analyzed at a dilution.
- D** = Identifies all compounds identified in an analysis at a secondary dilution factor.
- I** = Interference.
- NQ** = Result qualitatively confirmed but not able to quantify.
- N** = Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.
- X** = This flag is used for a TIC compound which is quantified relative to a response factor generated from a daily calibration standard (rather than quantified relative to the closest internal standard).
- Y** = Additional qualifiers used as required are explained in the case narrative.

GLOSSARY OF VOA DATA

ABBREVIATIONS

BS	=	Indicates blank spike in which reagent grade water is spiked with the CLP matrix spike solutions and carried through all the steps in the method. Spike recoveries are reported.
BSD	=	Indicates blank spike duplicate.
MS	=	Indicates matrix spike.
MSD	=	Indicates matrix spike duplicate.
DL	=	Suffix added to sample number to indicate that results are from a diluted analysis.
NA	=	Not Applicable.
DF	=	Dilution Factor.
NR	=	Not Required.
SP, Z	=	Indicates Spiked Compound.

TECHNICAL FLAGS FOR MANUAL INTEGRATION

Manual quantitation modifications or integrations are performed routinely to improve the data quality for a variety of technical reasons. Documentation of these modifications should be clear and concise. The following "flags" are used to indicate the technical reasons for quantitation modifications:

- MP** - Missed Peak: manually added peak not found by automatic quantitation program.
- PA** - Peak Assignment: quantitation report was changed to reflect correct peak assignment.
- RI** - Routine Integration: routine integrations are performed for some analytes that are consistently integrated improperly by the automatic integration programs. Examples are the dichlorobenzene isomers on the VOA packed column and benzo(b)fluoranthene/benzo(k)fluoranthene which are poorly resolved on the BNA column.
- SP** - Split Peak: the automatic integration improperly split the peak; a manual integration was performed to get the correct area.
- CB** - Coelution/Background: peak was manually integrated to eliminate contribution from coeluting compounds, background signal, or other interference.
- PI** - Proper Integration: a peak with poor or inconsistent integration (e.g., excessive tail) was properly integrated manually.

Report Date: 05/20/02 15:00

Client: **TNUHANFORD B02-054 H1763** Work Order: 11343606001 Page: 1a

*= Outside of EPA CLP QC limits.

Cust ID: B14DN9 B14DN9 B14DN9 VBLKVH VBLKVH BS

RFW#: 001 001 MS 001 MSD 02LVG108-MB1 02LVG108-MB1

Chlorobenzene	5 U	100 %	99 %	5 U	95 %
Ethylbenzene	5 U	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U	5 U
Xylene (total)	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane	5 U	5 U	5 U	5 U	5 U
Cyclohexanone	50 U	50 U	50 U	50 U	50 U
1,2,4-Trimethylbenzene	5 U	5 U	5 U	5 U	5 U

*= Outside of EPA CLP QC limits.

1E
VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B14DN9

Lab Name: Lionville Labs, Inc. Contract: 11343606001

Lab Code: Lionvi Case No.: _____

SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 0205L562-001

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: g050710

Level: (low/med) LOW

Date Received: 05/03/02

% Moisture: not dec. _____

Date Analyzed: 05/07/02

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	SILOXANE	19.648	5	J

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1E
VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKVH

Lab Name: Lionville Labs, Inc. Contract: 11343606001

Lab Code: Lionvi Case No.: _____

SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 02LVG108-MB1

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: g050706

Level: (low/med) LOW

Date Received: 05/07/02

% Moisture: not dec. _____

Date Analyzed: 05/07/02

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

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FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS[illegible]

Special Instructions:

SAF u BOZ-054

DATE/REVISIONS:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Lionville Laboratory Use Only

Samples were:

1) Shipped ☒ or
Hand Delivered ☐

Air Mail # See Buto

2) Ambient or Chilled

3) Received in Good Condition ☒ Or ☐ N

4) Samples

4 Property Preserved (Y) or N

5) Received Within

Holding Times \rightarrow or N

Tamper Resistant Seal was:

1) Present on Outer Package Y or N

2) Unbroken on Outer
Package of or N

3) Present on Sample

4) Unbroken on

Sample Y or N

COC Record Present
Urine Sample Result

Upon Satisfaction of:
Y or N

Cooler Temp. 3.3 °C

Relinquished by	Received by	Date	Time
Paul Ex / Hing		5/3/02	1030

Relinquished by	Received by	Date	Time
COMPOSITE	ORIGINAL		
WASTE	REWRITTEN		

Discrepancies Between
Samples Labels and
COC Record? Y or N

79/829/26270

02056562

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B02-054-02		Page 1 of 1	
Collector R. Fahlberg/R. Nielson		Company Contact Duane Jacques		Telephone No. 372-9651		Project Coordinator TRENT, SJ		Price Code 7N Data Turnaround 45 Days	
Project Designation 216-Z-11 Ditch Borehole QC Samples		Sampling Location 200 West		SAF No. B02-054		Air Quality <input type="checkbox"/>			
Ice Chest No. ERC 96.040		Field Logbook No. EL-1517-		COA B20CW5674C		Method of Shipment Federal Express			
Shipped To TMA/RECRA		Offsite Property No. A 020112		Bill of Lading/Air Bill No. 79182912-6270					
POSSIBLE SAMPLE HAZARDS/REMARKS Samples did not originate in radiological controlled area. No total activity associated with sample/samples. Special Handling and/or Storage RT Cool				Preservation HCl to pH <2 Cool 4C Type of Container No. of Container(s) Volume	aGs* 3 40mL				
SAMPLE ANALYSIS				See item (1) in Special Instructions.					
Sample No.	Matrix *	Sample Date	Sample Time						
B14DN9	WATER	4/25/02	0530	X					
CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS				Matrix *	
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time		See COC comments on SAF. (1) VOA - 8260A (TCL); VOA - 8260A (Add-On) (Trichloromono-fluoromethane); VOA - 8260A (App IX Add-On) (Tetrahydrofuran) Personnel not available to relinquish samples from the 3728 Ref # 1B on 5/2/02	
R. Nielson		4/25/02 1700		Ref # 1B		4/25/02 1700			
Ref # 1B 3728		5/2/02 0730		R. Nielson		5/2/02 0730			
ERC		5/2/02 0730		FED		5/2/02 0730			
FED		5/3/02 1030		R. Nielson		5/3/02 1030			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
LABORATORY SECTION		Received By		Title		Date/Time			
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By		Date/Time			

LIONVILLE LABORATORY INCORPORATED
SAMPLE RECEIPT CHECKLIST

CLIENT: *HANford*

Purchase Order/Project:

DATE: *5/3/02*

SAF# / SOW# / Release #: *B02-054*

Laboratory SDG #: *0205L562*

NOTE: ALL ENTRIES MARKED "NO" MUST BE EXPLAINED IN THE COMMENT SECTION

- | | | | | |
|--|---|-----------------------------|---|--|
| 1. Custody seals on coolers or shipping container intact, signed and dated? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | <input type="checkbox"/> see Comment # |
| 2. Outside of coolers or shipping containers are free from damage? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | <input type="checkbox"/> see Comment # |
| 3. Airbill # recorded? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | <input type="checkbox"/> see Comment # |
| 4. All expected paperwork received (coc and other client specific: historical data, alpha/beta or other screening data as applicable)? (paperwork sealed in plastic bag and taped to inside lid) | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | <input type="checkbox"/> see Comment # |
| 5. Sample containers are intact? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | <input type="checkbox"/> see Comment # |
| 6. Custody seals on sample containers intact, signed and dated? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | <input type="checkbox"/> see Comment # |
| 7. All samples on coc received? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | <input type="checkbox"/> see Comment # |
| 8. All sample label information matches coc? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | <input type="checkbox"/> see Comment # |
| 9. Laboratory QC samples designated on coc? (QC stickers placed on bottles?) | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | <input type="checkbox"/> see Comment # |
| 10. Shipment meets LVLJ Sample Acceptance Policy? (identify all bottles not within policy. See reverse side for policy) | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | <input type="checkbox"/> see Comment # |
| 11. Where applicable, bar code labels are affixed to coc? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> see Comment # |
| 12. coc signed and dated? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | <input type="checkbox"/> see Comment # |
| 13. coc faxed or emailed to client? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | <input type="checkbox"/> see Comment # |
| 14. Project Manager/Client contacted concerning discrepancies? (name/date) | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | <input type="checkbox"/> see Comment # |

Cooler # / temp and Comments:

*2C
-040 3.3*

Laboratory Sample Custodian:

[Signature]

Laboratory Project Manager:

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